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John W. Linebarger

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN W. LINEBARGER
and DURGA P. SATAPATHY

Appeal 2008-0073
Application 10/020,062
Technology Center 2600

Decided: August 26, 2008

Before MAHSHID D. SAADAT, JOHN A. JEFFERY,
and MARC S. HOFF, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1-12, 14, 15, 18-20, 22-28, 41-50, and 52-55. Claims 29-40 are withdrawn from consideration while claim 56 is indicated as allowable and claims 13, 16, 17, 21, and 51 are objected to by the

Examiner for being dependent on rejected claims, but otherwise allowable if rewritten in independent form to include all the limitations of their base claim and those of any intervening claims. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

STATEMENT OF THE CASE

Appellants' invention relates to a system for selecting appropriate spectrum ranges for wireless communication among licensed and unlicensed spectrum comprising a spectrum selector configured to select between a licensed spectrum transceiver and an unlicensed spectrum transceiver (Spec. 1-2).

Independent Claim 1 is representative and reads as follows:

1. A system for selecting spectrum comprising:

a licensed spectrum transceiver configured to communicate over licensed spectrum;

an unlicensed spectrum transceiver configured to communicate over unlicensed spectrum; and

a spectrum selector configured to select the licensed transceiver or the unlicensed transceiver for communication.

The Examiner relies on the following prior art in rejecting the claims:

Smith	US 5,694,414	Dec. 2, 1997
Hamada	US 6,873,607 B1	Mar. 29, 2005 (filed Sep. 30, 1998)
Karabinis	US 6,892,068 B2	May 10, 2005 (filed Aug. 1, 2001)

Shibutani	US 6,940,824 B2	Sep. 6, 2005 (filed Apr. 5, 2001)
Jagannatharao	US 6,952,434 B1	Oct. 4, 2005 (filed Dec. 27, 2000)

Claims 1-10, 23-28, 41-48, and 55 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Smith.

Claims 11, 12, and 49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith and Hamada.

Claims 14, 15, and 50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith and Shibutani.

Claims 18-20, 52, and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith and Karabinis.

Claims 22 and 54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith and Jagannatharao.

Rather than repeat the arguments here, we make reference to the Briefs and the Answer for the respective positions of Appellants and the Examiner.

ISSUE

The issue is whether the Examiner erred in rejecting the claims under 35 U.S.C. §§ 102(e) and 103(a). The issue specifically turns on whether Smith anticipates Appellants' claimed invention by disclosing a licensed spectrum transceiver separate from an unlicensed spectrum transceiver.

FINDINGS OF FACT

1. Smith relates to spread-spectrum communication techniques using multiple modes and multiple bands which include both licensed and unlicensed frequency bands (Abstract).
2. As depicted in Figure 2 of Smith, a dual mode transmitter includes, among other components, a mode controller 103 and a mode select switch 104 connected to a spread-spectrum modulator 111 (col. 6, ll. 23-30).
3. The Narrowband or spread-spectrum modulation of Smith is selected using the mode controller 103 (col. 6, ll. 46-47) which controls a mode select switch 104 and directs the processed information signal to the narrowband modulator 113 (col. 6, ll. 51-54).
4. Smith further shows in Figure 12 that the communication may be conducted in either one of two different frequency bands using a single frequency synthesizer 606 by generation and transmission of a signal in either or both of two frequency bands (col. 16, ll. 54-58).

PRINCIPLES OF LAW

1. Anticipation

A rejection for anticipation under section 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference. *See In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994). “Anticipation of a claim requires a finding that the claim at issue ‘reads on’ a prior art reference.” *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed. Cir. 1999) (quoting *Titanium Metals Corp. of Am. v. Banner*, 778 F.2d 775, 781 (Fed. Cir. 1985)).

2. *Obviousness*

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Kahn*, 441 F.3d 977, 987-88 (Fed. Cir. 2006), *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991), and *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

The Examiner can satisfy this burden by showing “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (*citing In re Kahn*, 441 F.3d at 988 (Fed. Cir. 2006)).

ANALYSIS

As described above, Smith transmits over licensed and unlicensed spectrum by using a single synthesizer (FF 1-4). We disagree with the Examiner’s characterization of the telephone handset 410 of Smith as having both licensed spectrum and unlicensed spectrum transceivers since the set has both capabilities (Ans. 9). As argued by Appellants (App. Br. 6), the two different bands are achieved by a single transmitter which switches the frequency of transmission using the narrowband modulator 113 and the spread-spectrum modulator 111 (FF 2-3).

As such, we agree with Appellants that, since the components shown in Figure 2 of Smith are shared for transmission in both spectrums, the two modulators 111 and 113 do not constitute separate transmitters. In fact, both modulators are parts of a single transmitter and are shared for transmission over both the licensed spectrum and the unlicensed spectrum. In other words, as pointed out by Appellants (App. Br. 8; Reply Br. 3), Smith selects

between the modulators that belong to the same transmitter and receiver (FF 4).

CONCLUSION

On the record before us, we find that the Examiner fails to make a prima facie case that Smith anticipates claim 1 or other independent claim 41 which includes similar limitations. Therefore, in view of our analysis above, the 35 U.S.C. § 102 rejection of claims 1-10, 23-28, 41-48, and 55 as anticipated by Smith cannot be sustained. Additionally, we do not sustain any of the 35 U.S.C. § 103 rejections of claims 11, 12, 14, 15, 18-20, 22, 49, 50, and 52-54 over Smith in combination with either Hamada, Shibutani, Karabinis, or Jagannatharao as the Examiner has not identified any teachings in these prior art references related to separate licensed and unlicensed spectrum transceivers to overcome the deficiencies of Smith discussed above.

DECISION

The decision of the Examiner rejecting claims 1-12, 14, 15, 18-20, 22-28, 41-50, and 52-55 is reversed.

REVERSED

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